



## ATTACHMENT A

### CLAIMS:

#### 1-39 (canceled)

40. (new) A method for diagnosing breast cancer in a subject comprising determining levels of expression of p14 peptide in one or more samples from said subject, a high level of expression signifying a high probability for breast cancer in said subject.

41. (new) The method of Claim 40, comprising assaying for the level of p14 peptide in a sample obtained from the subject, said method comprises:

- (a) contacting said sample with anti-p14 antibodies;
- (b) determining binding of anti-p14 antibodies to p14 peptide.

42. (new) The method of Claim 41, wherein said sample is a tissue or body fluid sample excised or withdrawn from a suspicious area in the breast of the subject.

43. (new) The method of Claim 42, wherein said sample is selected from fresh biopsy section, cryo-section or paraffin embedded section.

44. (new) The method of Claim 40, wherein said sample is a blood sample.

45. (new) The method of Claim 40, comprising assaying for the level of anti-p14 antibodies in a sample obtained from the subject, said method comprises:

- (a) contacting said sample with p14 peptide;
- (b) determining binding of p14 peptide to anti-p14 antibodies.

46. (new) The method of Claim 45, wherein said p14 peptide is His-tag p14 peptide comprising the sequence depicted in SEQ ID NO:2.

47. (new) A method for screening samples into such which signify that subjects from which they were obtained have a relatively high possibility of having or being susceptible of developing breast cancer and such which signify that subjects from which they were obtained have a relatively lower probability of having or

being susceptible of developing breast cancer, the method comprising contacting the samples with anti-p14 antibodies and determining binding of anti-p14 antibodies and p14 peptide in said sample, a high degree of binding signifying a corresponding higher probability of having or being susceptible of developing breast cancer.

48. (new) The method of Claim 47, wherein said sample is a tissue or fluid sample excised or withdrawn from a suspicious area in the breast of the subject.

49. (new) The method of Claim 48, wherein said sample is selected from fresh biopsy section, cryo-section or paraffin embedded section.

50. (new) The method of Claim 49, wherein said sample is a blood sample.

51. (new) A method for screening samples into such which signify that subjects from which they were obtained have a relatively high possibility of having or being susceptible of developing breast cancer and such which signify that subjects from which they were obtained have a relatively lower probability of having or being susceptible of developing breast cancer, the method comprising contacting the samples with p14 peptide and determining binding of p14 peptide with anti-p14 antibodies, a high degree of binding signifying a corresponding higher probability of having or being susceptible of developing breast cancer.

52. (new) The method of Claim 51, wherein said sample is a blood sample.

53. (new) The method of Claim 52, wherein said p14 peptide is His-tag p14 peptide comprising the sequence depicted in SEQ ID NO:2.

54. (new) A method for the treatment of breast cancer comprising administering to a subject in need of anti-breast cancer treatment an amount of anti-p14 antibodies, the amount being sufficient to achieve an anti cancer effect in said subject.

55. (new) The method of Claim 54, wherein said anti-p14 antibodies are humanized antibodies.

56. (new) The method of Claim 54, wherein said anti-p14 antibodies are bound to a protein transducing element.

57. (new) The method of Claim 56, wherein said protein transducing element is the (37-72) Tat fragment of HIV-HV1B1 Tat.

58. (new) The method of Claim 54, wherein said anti-p14 antibodies are bound to a cytotoxic agent.
59. (new) A method for the treatment of breast cancer comprising administering to a subject in need an amount of p14 peptide, the amount being effective to elicit production of anti-p14 antibodies in said subject.
60. (new) A pharmaceutical composition for the treatment of breast cancer comprising as active ingredient an amount of anti-p14 antibodies, the amount being sufficient to achieve a therapeutic effect in said subject.
61. (new) The pharmaceutical composition of Claim 60, wherein said anti-p14 antibodies are humanized antibodies.
62. (new) The pharmaceutical composition of Claim 61, wherein said anti-p14 antibodies are bound to a protein transducing element.
63. (new) The pharmaceutical composition of Claim 62, wherein said protein transducing element is the (37-72) Tat fragment of HIV-HV1B1 Tat.
64. (new) The pharmaceutical composition of Claim 60, wherein said anti-p14 antibodies are bound to a cytotoxic agent.
65. (new) A vaccine comprising as active ingredient an amount of p14 peptide or an immunogenic fragment thereof, the amount being sufficient to elicit in a subject production of anti-p14 antibodies.